

**DRAFT RESPONSE
UNOFFICIAL COMMUNICATION**

REMARKS

Claims XX-XX are currently pending in the application. As a result of the restriction requirement, claims 1-12 and 18-20 were withdrawn from consideration. Claims 13-17 are being examined on their merits. Claim 21 is newly added.

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AMENDMENTS TO THE CLAIMS

Claim 13 was amended to incorporate the limitations claims 15 and 21. Claim 13 was further amended to rephrase the term "drug" as "test compound". Claim 16 was amended to . Claim 21 was amended to Claim All of these amendments are supported by the as-filed application and do not constitute the addition of new matter. Applicants therefore request their entry.

Claims Rejections Under 35 USC § 112, Second Paragraph

As set forth on pages 2-3 of the outstanding Office Action, claims 13-17 are rejected under 35 USC § 112 for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, it is alleged that with respect to claim 13 that "it is not clear what the alteration in APAF1 gene is that results in depression." It is further alleged that it is not clear if the homolog is the mutant form of APAF1, or if the homolog has a mutation corresponding to that in APAF1. Without acquiescing to the propriety of this rejection, Applicants have amended the claims and believe the rejection has been rendered moot. Applicants therefore respectfully request withdrawal of this rejection.

To support the rejection the Patent Office poses such questions as "if a APAF1 mutant decreases the activity of APAF1, then how can it be associated with depression?" Applicants' response to such questions is that it does not matter what the activity of the variant is. APAF1 variants that decrease the activity of APAF1 can be used in the drug screens of the invention simply by ascertaining if the test compound decreases the activity of the variant regardless of the variant is more active or less active than wild-type APAF1. Since Applicants were the first to discover that APAF1 variants are associated with depression and have fully disclosed their discovery to the public, why does the Patent Office wish to eviscerate the breadth of their protection?

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In view of the amendments to the claims, and the reasoning above, it is believed that this rejection has been rendered moot. Applicants therefore respectfully request withdrawal of this rejection.

Claims Rejections Under 35 USC § 112, First Paragraph

As set forth on pages 3-4 of the Office Action, claims 13-17 are rejected under 35 USC § 112, first paragraph, for allegedly failing to comply with the written description requirement. Without acquiescing to the propriety of this rejection, Applicants have amended the claims and believe the rejection has been rendered moot. Applicants therefore respectfully request withdrawal of this rejection.

To support the rejection the Patent Office poses such questions as "Focusing only on the mutant APAF1, this mutant would have to maintain its wild-type biological activity – which mutants would be expected to maintain wild-type biological activity. The dependent claims list several mutations, but nowhere in the specification has the activity of these mutant APAF1 polypeptides been explored." First, the Applicants' must not understand this statement properly since the specification clearly discloses the activity of the mutant APAF1s (see specification at pages 57-58, and the associated FIGS 1-3, which clearly show/demonstrate the biological activity of these mutants). This was pointed out in the last response that the Applicant submitted (amendment dated June 29, 2005). Secondly, again it does not matter what the activity of the APAF1 variant is, what matters is the ability of the test compound to reduce the ability to activate the apoptosome. Compounds with this activity are expected to have antidepressant activity.

In view of the amendments to the claims, and the reasoning above, it is believed that this rejection has been rendered moot. Applicants therefore respectfully request withdrawal of this rejection.

CONCLUSION

It is not believed that any time extension or fees are required with this response. If this is incorrect, an extension of time as deemed necessary is hereby requested, and the Commissioner is hereby authorized to charge any appropriate fees or deficiency or credit any overpayment to Deposit Account no. 50-1627.

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Respectfully submitted,

Jonathan A. Baker, Ph.D.
Registration No. 49,022

Intellectual Property Department
Myriad Genetics, Inc.
(Customer No. 26698)
320 Wakara Way
Salt Lake City, UT 84108
Telephone: 801-584-3600
Fax: 801-883-3871

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